UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,537	03/19/2001	Vladimir Matena	SUNMP002B	2572

7590 06/28/2005	EXAMINER
JOE A. BROCK, II	DELGADO, MICHAEL A
MARTINE PENILLA & KIM, LLP	
710 LAKEWAY DRIVE	

ART UNIT	PAPER NUMBER
2144	

SUITE 170
SUNNYVALE, CA 94085

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/812,537	MATENA ET AL.
	Examiner	Art Unit	
	Michael S. A. Delgado	2144	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 December 2004</u>.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-8 and 10-20</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-8 and 10-20</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>19 March 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

In response to applicant's arguments, the recitation Java Platform has not been given patentable

weight because the recitation occurs in the preamble. A preamble is generally not accorded any

patentable weight where it merely recites the purpose of a process or the intended use of a

structure, and where the body of the claim does not depend on the preamble for completeness

but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*,

535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478,

481 (CCPA 1951).

Specification

1.   The disclosure is objected to because of the following informalities: Page 13, line 18 the

"application 306" should be "application 302".

      Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1-8 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

6,516,350 by Lumelsky et al in view of US 6,665,861 by Francis et al.

In claim 1, Lumelsky teaches about a method for load balancing in a JAVA based

environment, the method comprising (Fig 6)

executing an application having a first service module "media streaming" and a control

module "Service Control Plane- SCP", wherein the control module includes application-specific

policies "Quality of Service- QoS" for the application (Col 15, lines 5-20);

sensing a utilization of system resources "RMF" (Col 14, lines 50-65) (Col 15, lines 5-

20);

generating a second service module, base on the application-specific policies using the

first service module in response to the sensed utilization of system resources (Col 15, lines 5-20);

(This is the process of migration)(QoS is base on an application-specific policies).

transferring a state of the first service module to the second service module (Col 15, lines

5-20); and (This is the process of migration)

terminating the first service module (Col 15, lines 5-20). (This is the process of migration)

but does not explicitly teach about the application being implemented using a JAVA

programming language.

JAVA is well known for it portability and is well suited for load balancing operation as

disclosed by Francis (Col 1, line 65-Col 2, line 5) (Col 5, lines 15-20).

The portability in JAVA, makes software programming less complex, as it can be used by

different platform, which is the case in load balancing operation..

It would have been obvious to some one of ordinary skill at the time of the invention to use a

JAVA programming language because of its portability.

In claim 2, Lumelsky combined with Francis, teaches about a method as recited in claim 1, wherein the operation of sensing the utilization of system resources includes polling system resources "monitoring" (Lumelsky Col 13, lines 10-20).

In claim 3, Lumelsky combined with Francis, teaches about a method as recited in claim 1, wherein the operation of sensing the utilization of system resources includes receiving notifications from system resources (Lumelsky Col 11, lines 10-20).

In claim 4, Lumelsky combined with Francis, teaches about a method as recited in claim 1, wherein the application-specific policies include a specific server on which to generate the second service module (Lumelsky Col 11, lines 20-30).

In claim 5, Lumelsky combined with Francis, teaches about a method as recited in claim 4, wherein the second service module is generated using the specific server (Col 14, lines 50-65) (Lumelsky Col 15, lines 5-20).

In claim 6, Lumelsky combined with Francis, teaches about a method as recited in claim 5, wherein the specific server is selected based on the application-specific polices of the control module "QoS" (Lumelsky Col 15, lines 5-20).

In claim 7, Lumelsky combined with Francis, teaches about an application having application-specific strategies for use in a JAVA environment, comprising (Fig 6):

a plurality of service modules having functionality for the application (multimedia accessing" (Lumelsky Col 5, lines 35-50); and

control module "SCP" in communication with the plurality of service modules, wherein

the control module includes application-specific policies for the application, the application

specific policies are programmed using a JAVA programming language (Col 5, lines 35-50)

(Covered in claim 1) .

In claim 8, Lumelsky combined with Francis, teaches about an application as recited in

claim 7, wherein the control module manages the service modules (Lumelsky Col 5, lines 25-

50).

In claim 10, Lumelsky combined with Francis, teaches about an application as recited in

claim 9, wherein the application-specific policies include application-specific load balancing

polices (Lumelsky Col 11, lines 10-30).

In claim 11, Lumelsky combined with Francis, teaches about an application as recited in

claim 10, wherein a first server module of the plurality of service modules is capable of moving

to a second server based on the load balancing polices (Lumelsky Col 15, lines 5-20).

In claim 12, Lumelsky combined with Francis, teaches about an application as recited in

claim 11, wherein the control module initiates a generation of a second service module on the

second server (Lumelsky Col 15, lines 5-20).

In claim 13, Lumelsky combined with Francis, teaches about an application as recited in

claim 12, wherein a state of the first service module is transferred to the second service module

(Lumelsky Col 15, lines 5-20). (This is the process of migration)

In claim 14, Lumelsky combined with Francis, teaches about an application as recited in

claim 13, wherein the first service module is terminated after the state of the first service module

is transferred to the second service module (Lumelsky Col 15, lines 5-20). (This is the process of migration)

In claim 15, Lumelsky combined with Francis, teaches about a method for moving an application within a JAVA environment, comprising the operations of (Fig 6):

executing a first service module "media streaming" and a control module "SCP" on a first server, the control module having application-specific policies "QoS" for an application, the application specific policies are programmed using a JAVA programming language (Lumelsky Col 14, lines 50-65) (Lumelsky Col 15, lines 5-20) (Covered in claim 1) ;

sending a message from the control module to an executive runtime module "System management layer" , the message requesting the executive runtime module to move the first service module to a second server (Lumelsky Col 11, lines 10-30) (Lumelsky Col 15, lines 5-20);

generating a second service module on the second server, the second service module having a state equivalent to a state of the first service module (Lumelsky Col 15, lines 5-20); (This is the process of migration) and

terminating the first service module (Lumelsky Col 15, lines 5-20). (This is the process of migration)

In claim 16, Lumelsky combined with Francis, teaches about a method as recited in claim 15, further comprising the operation of obtaining the state of the second service module by a direct transfer from the first service module (Lumelsky Col 15, lines 20-30).

In claim 17, Lumelsky teaches about a method as recited in claim 15, further comprising the operation of obtaining the state of the second service module by using a state server that is

shared with the first service module (Lumelsky Col 14, lines 50-55) (Lumelsky Col 15, lines 10-20).

In claim 18, Lumelsky combined with Francis, teaches about a method as recited in claim 16, wherein the message from the control module to the executive runtime module includes an identity of the second server (Lumelsky Col 11, lines 20-30).

In claim 19, Lumelsky combined with Francis, teaches about a method as recited in claim 15, further comprising the operation of disabling requests to the first service module "remaps" (Lumelsky Col 11, lines 20-30). (This is the process of remapping).

In claim 20, Lumelsky combined with Francis, teaches about a method as recited in claim 19, further comprising the operation of enabling requests to the second service module(Lumelsky Col 11, lines 20-30). (This is the process of remapping).

Conclusion

4.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US patent no. 6,463,454 by Lumelsky et al. teaches about a system and method for integrated load distribution and resource management on internet environment

US patent no. 6,393,459 by Lurndal. teaches about a process migration method for multicomputer system, involves issuing request for migration of processes from source site to destruction site and creating copy of process operative on destination site.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923

. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100